

Innovations in Highway Construction: The Keys to Meeting the Challenge Before Us

Gary Hoffman, P.E
Deputy Secretary for
Highway Administration



Challenges

- Deteriorated infrastructure
- Growing demands and expectations
 - Highway user
 - Safety
 - Congestion
 - The Nation
 - Economic growth
- Inadequate resources
 - Financial
 - Staff



Addressing the Challenge

Highway Industry

"I can build it faster,
But it will cost more and
The quality may suffer"

versus

Addressing the Challenge

Private Industry

"Better, Faster and Lower Cost"

Examples:

Computers and Automobiles

How can Highways get all 3?

We Can by Changing the Highway Construction Business Model

- Leadership
- Innovations
- Success Stories

Leadership

- The “critical” ingredient
- Highway Agencies and Industry
- Top down commitment
- Set the direction, raise expectations
- Energize and mobilize staff
- Follow through

Innovations

Technologies, Processes and Practices



“Taking advantage of innovations that are already out there is the key”

DOT Secretary Norm Mineta, 4-15-04

Innovations

AASHTO Technology Implementation Group

Vision

A culture where **rapid advancement** and implementation of **high payoff, innovative** technologies is the **expectation** of the transportation community.

Mission

Champion the implementation of technology among AASHTO member agencies, local agencies, and their industry partners to improve the nation's transportation system.

Innovations

AASHTO TIG Focus Technologies

- Prefabricated Bridge Elements & Systems
- ITS Technologies in Work Zones
- Accelerated Construction
- Global Positioning System
- Air Void Analyzer
- Thermal Imaging for Commercial Vehicle Brakes
- FRP Repair for Overhead Sign Structures
- Road Safety Audits
- Cable Median Barriers
- Weigh In Motion/Virtual Weigh Stations

Success Stories

- Proof it can be done
- Document the benefits
- Build and sustain the momentum
- Examples
 - HYPERFIX I-65&70, Indiana
 - Mitchell Gulch Bridge, Colorado
 - Our next three speakers

Safer, Faster, Better, Less Costly



- Raise everyone's expectations.
- Put the motorist first.
- Reach out for innovation.
- Strive for excellence.
- The impossible is possible, but first you must believe.
- Lead!